STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

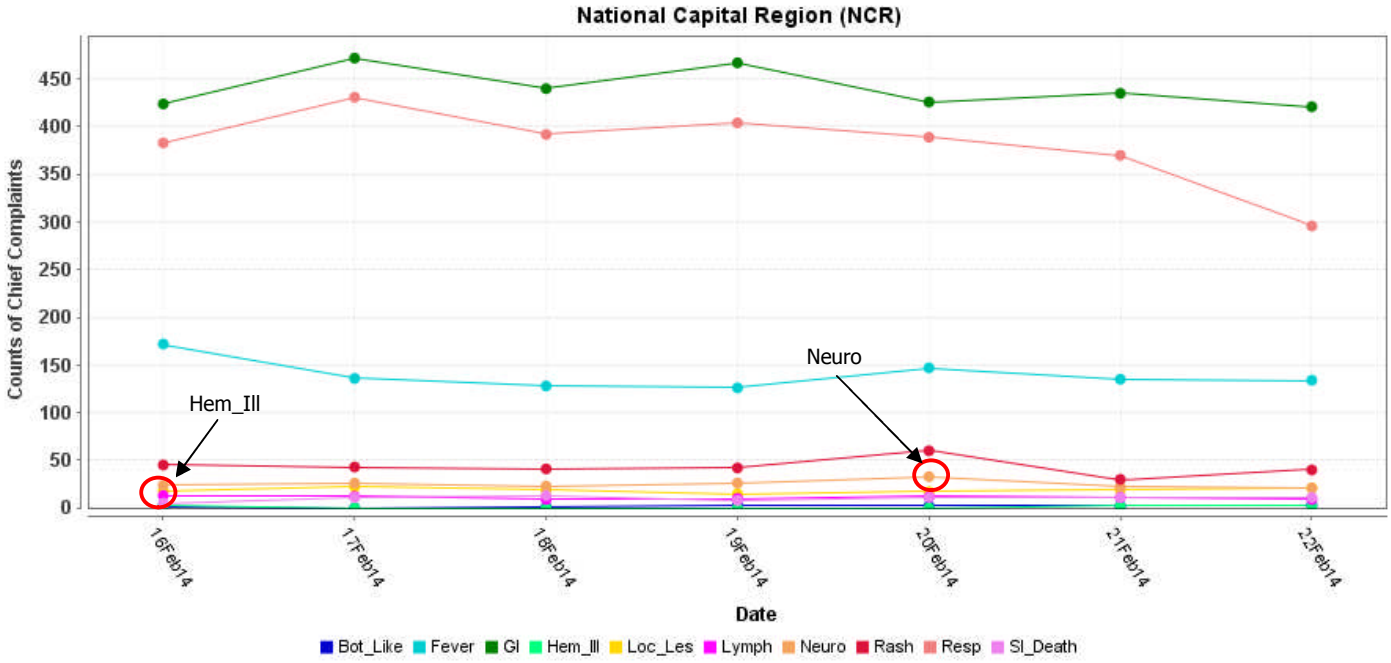
February 28, 2014

Public Health & Emergency Preparedness Bulletin: # 2014:08
Reporting for the week ending 02/22/14 (MMWR Week #08)

CURRENT HOMELAND SECURITY THREAT LEVELS

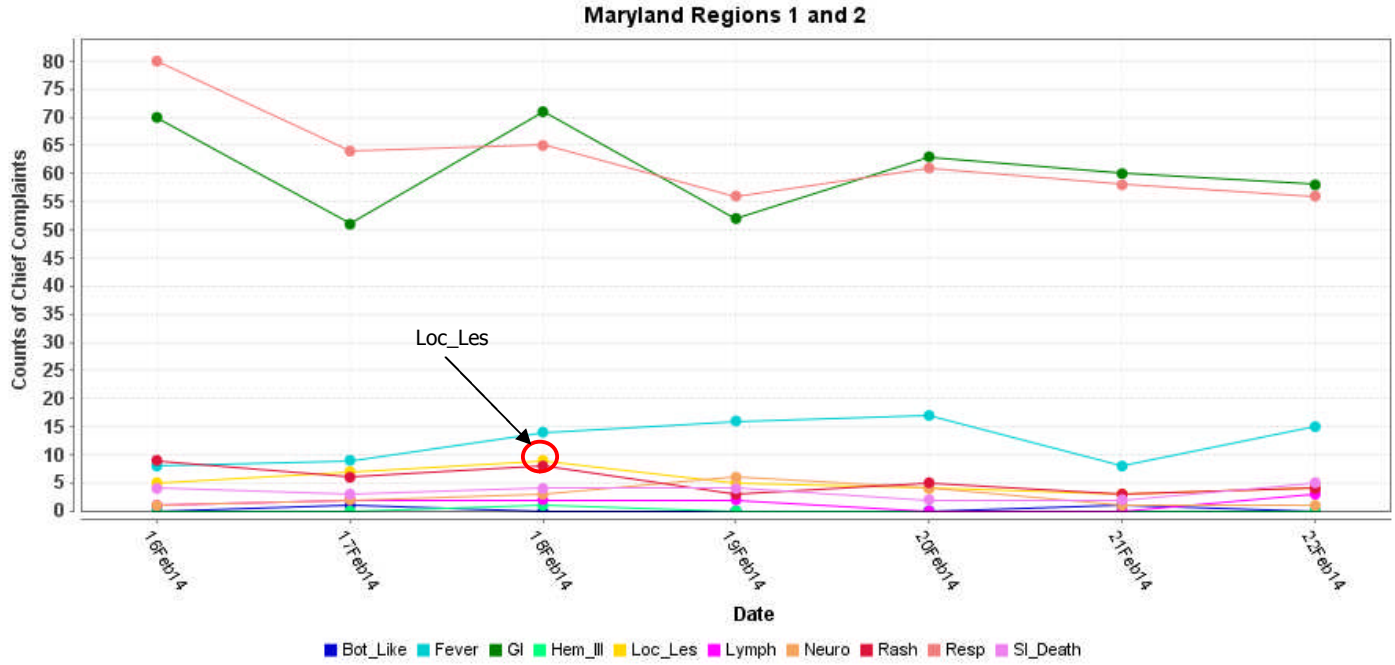
National: **No Active Alerts**
Maryland: **Level Four (MEMA status)**

SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

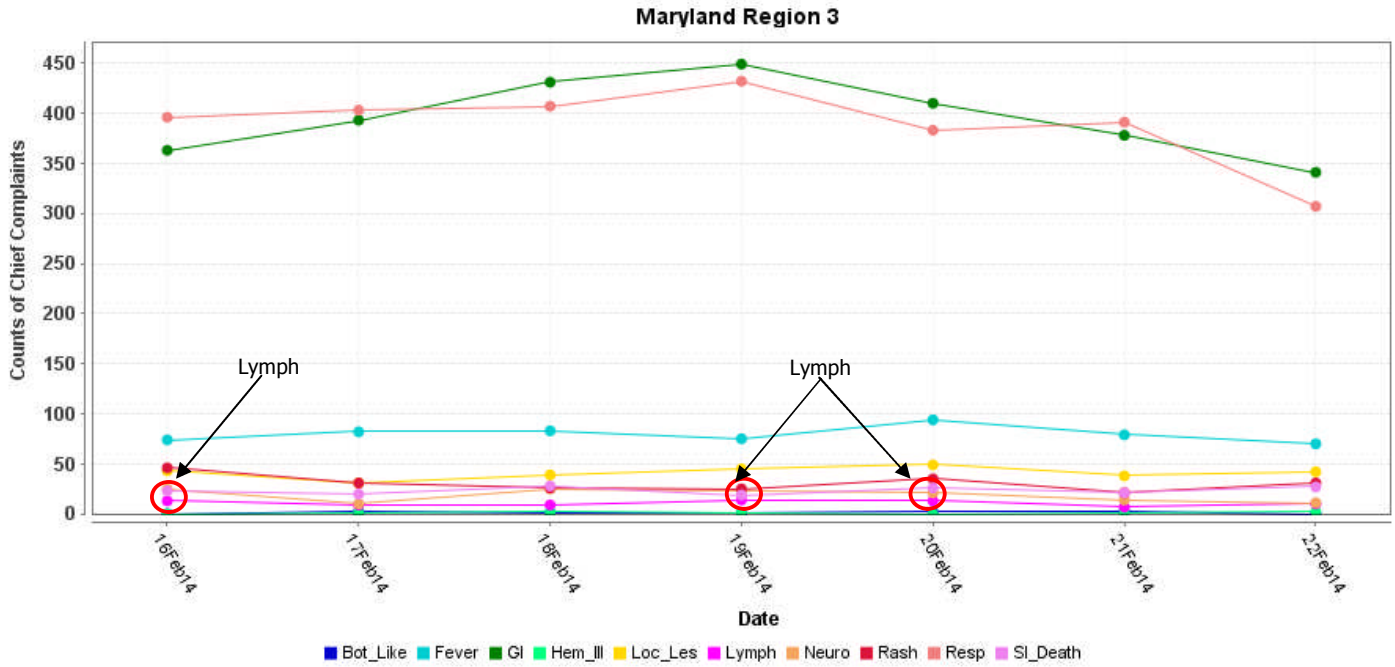


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

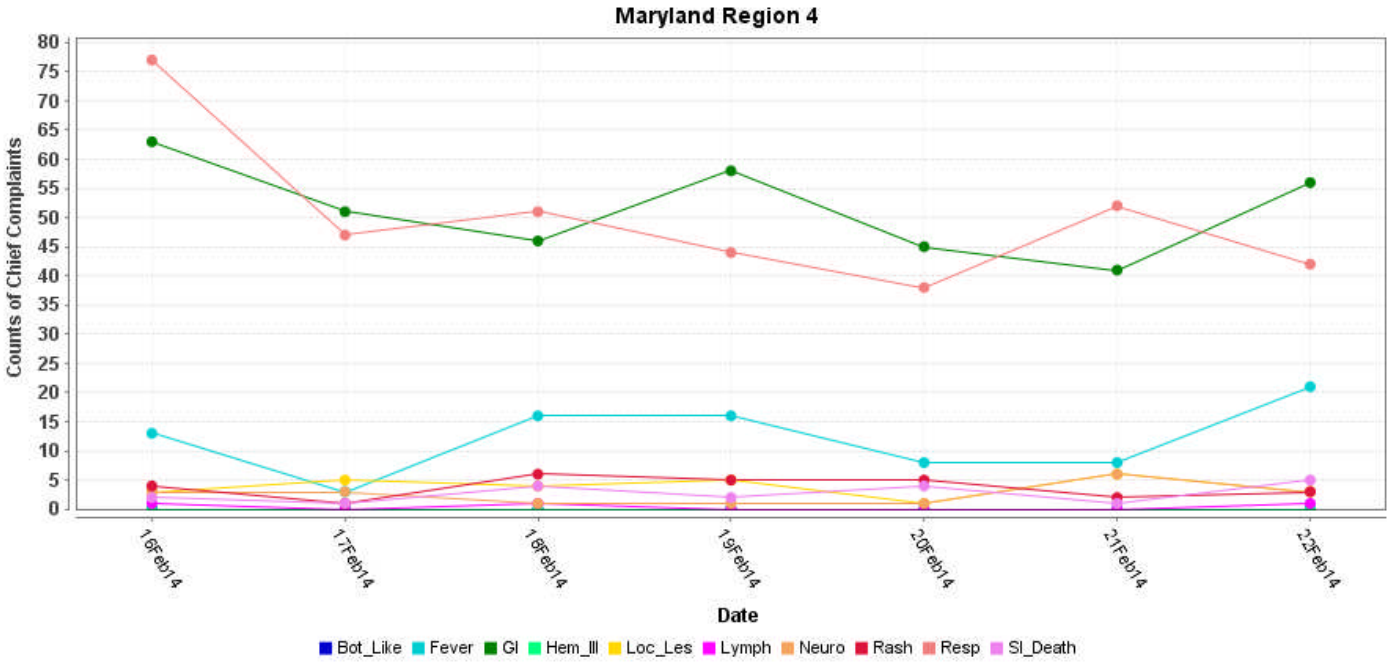
MARYLAND ESSENCE:



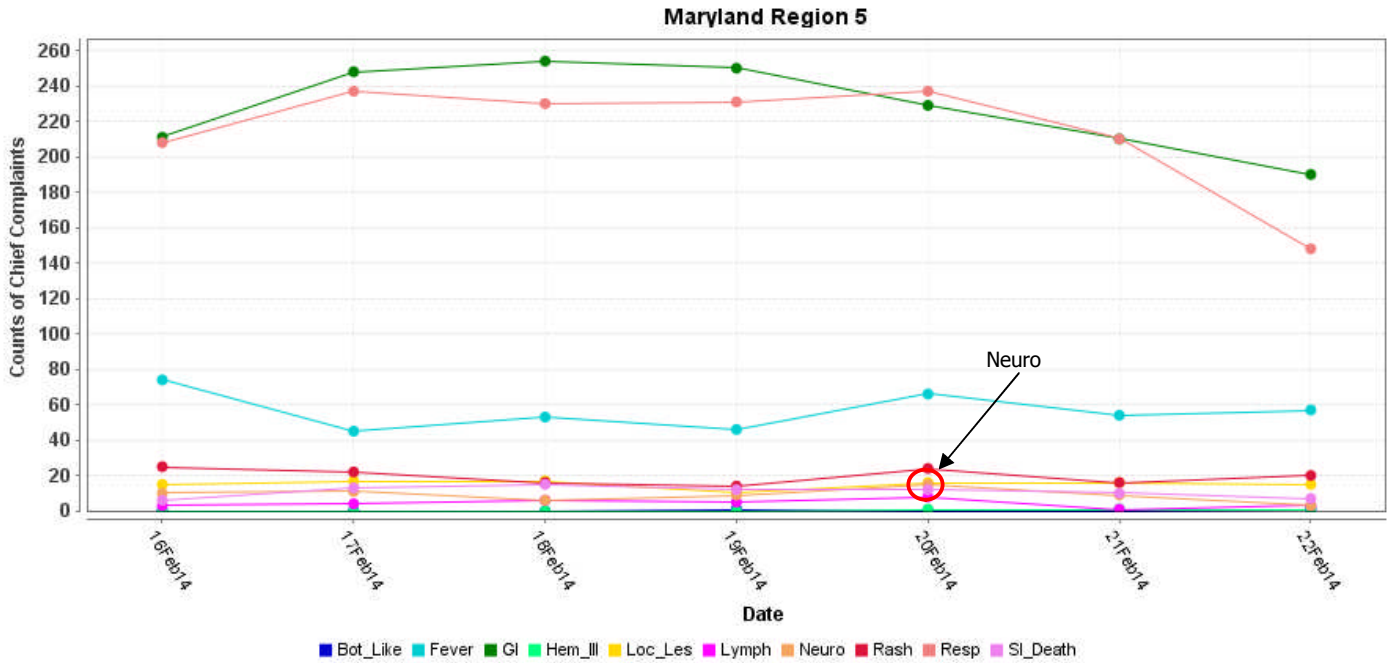
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



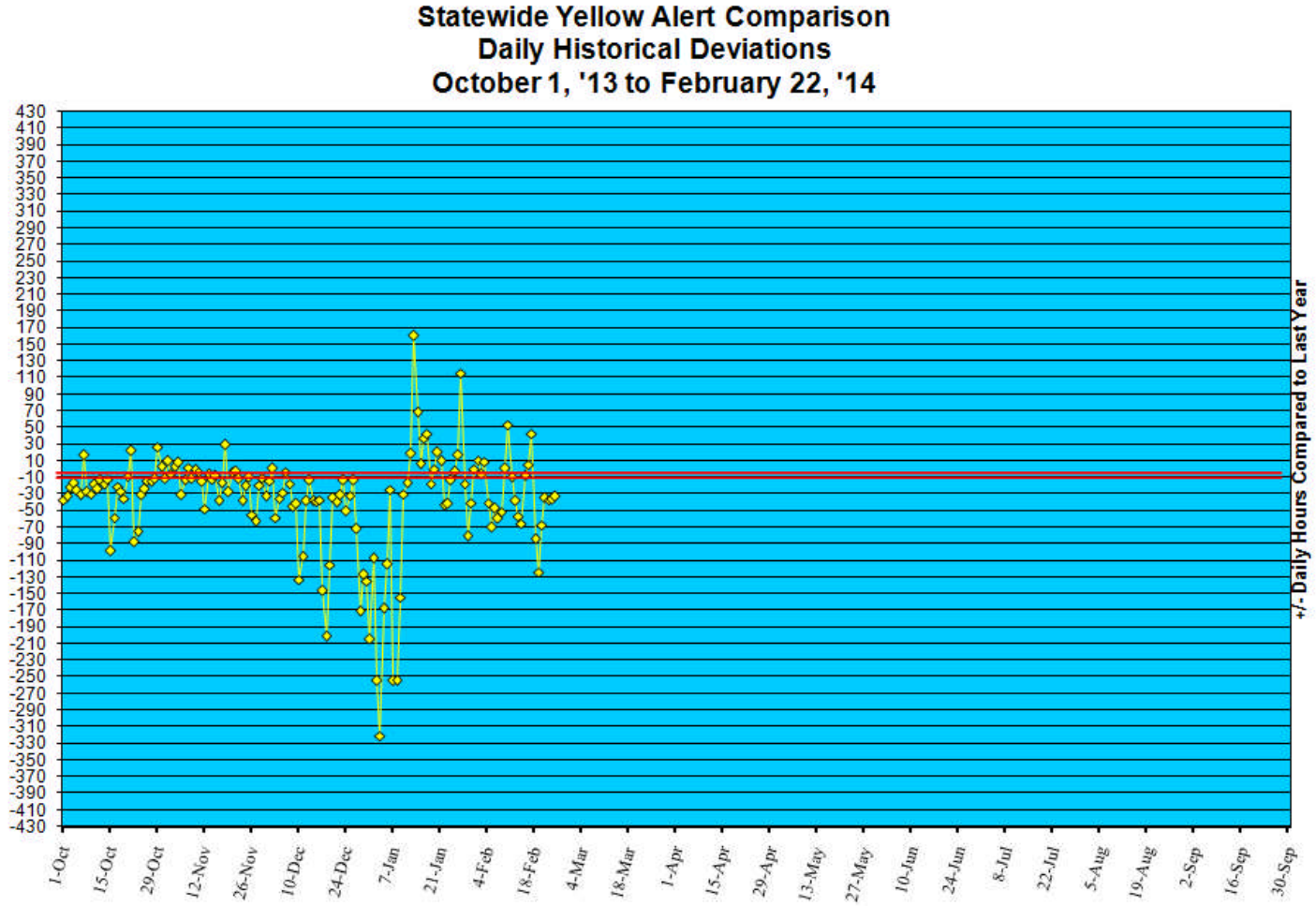
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/13.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in January 2014 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (February 16 - February 22, 2014):	7	0
Prior week (February 9 - February 15, 2014):	6	0
Week#08, 2013 (February 17 - February 23, 2014):	3	0

3 outbreaks were reported to DHMH during MMWR Week 08 (February 16-22, 2014)

1 Gastroenteritis Outbreaks
1 outbreak of GASTROENTERITIS in a Nursing Home

1 Foodborne Outbreak
1 outbreak of INFLUENZA in a Nursing Home

1 Respiratory Illness Outbreak
1 outbreak of SCABIES in an Institution

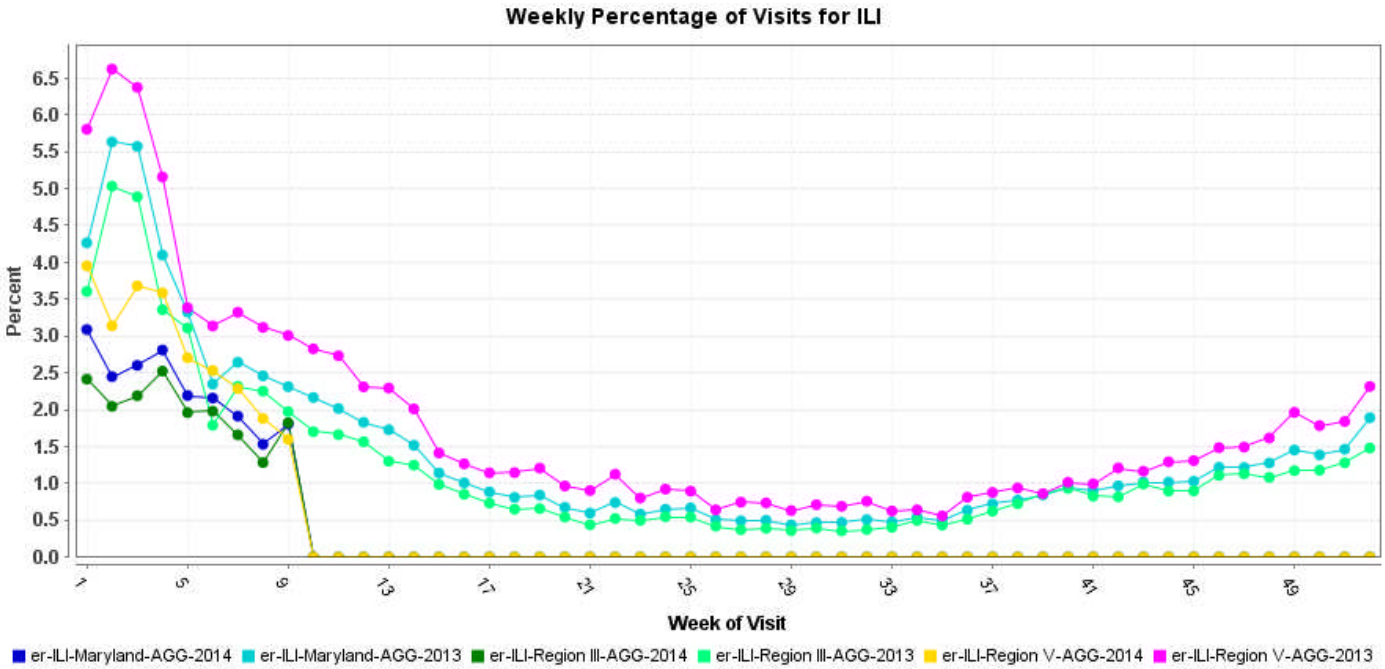
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 8 was: Widespread with Minimal Intensity.

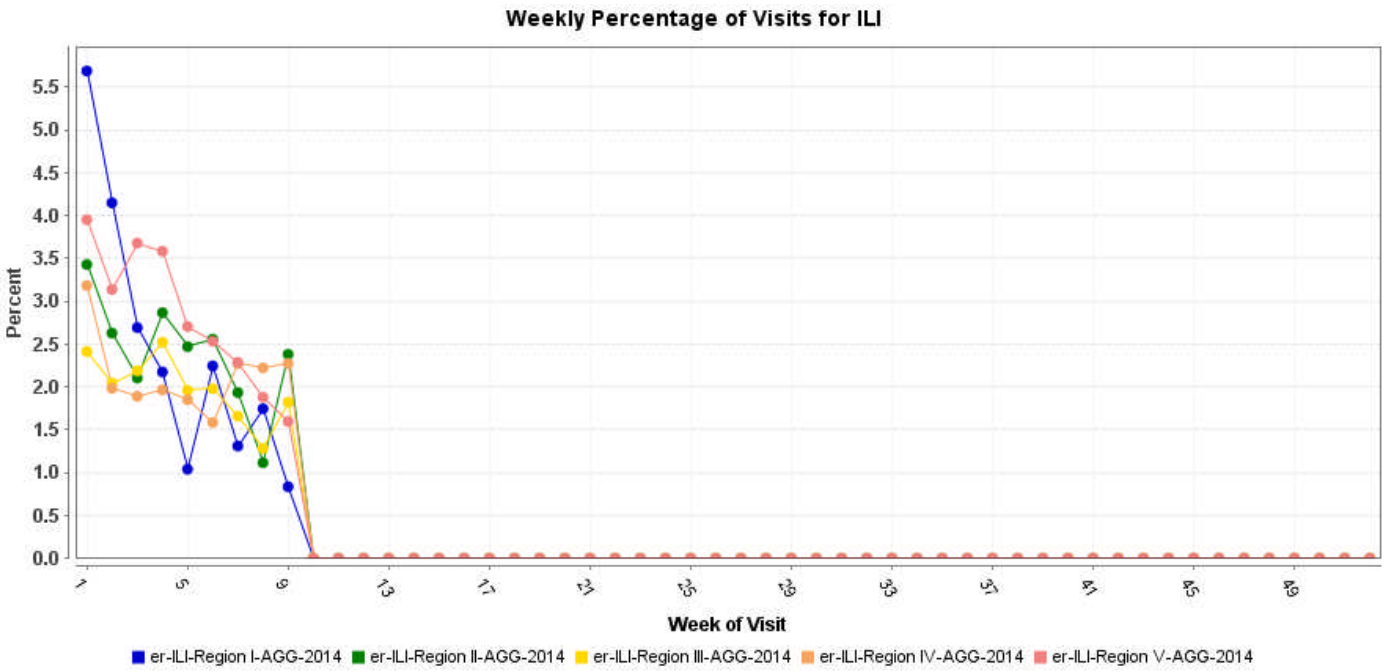
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



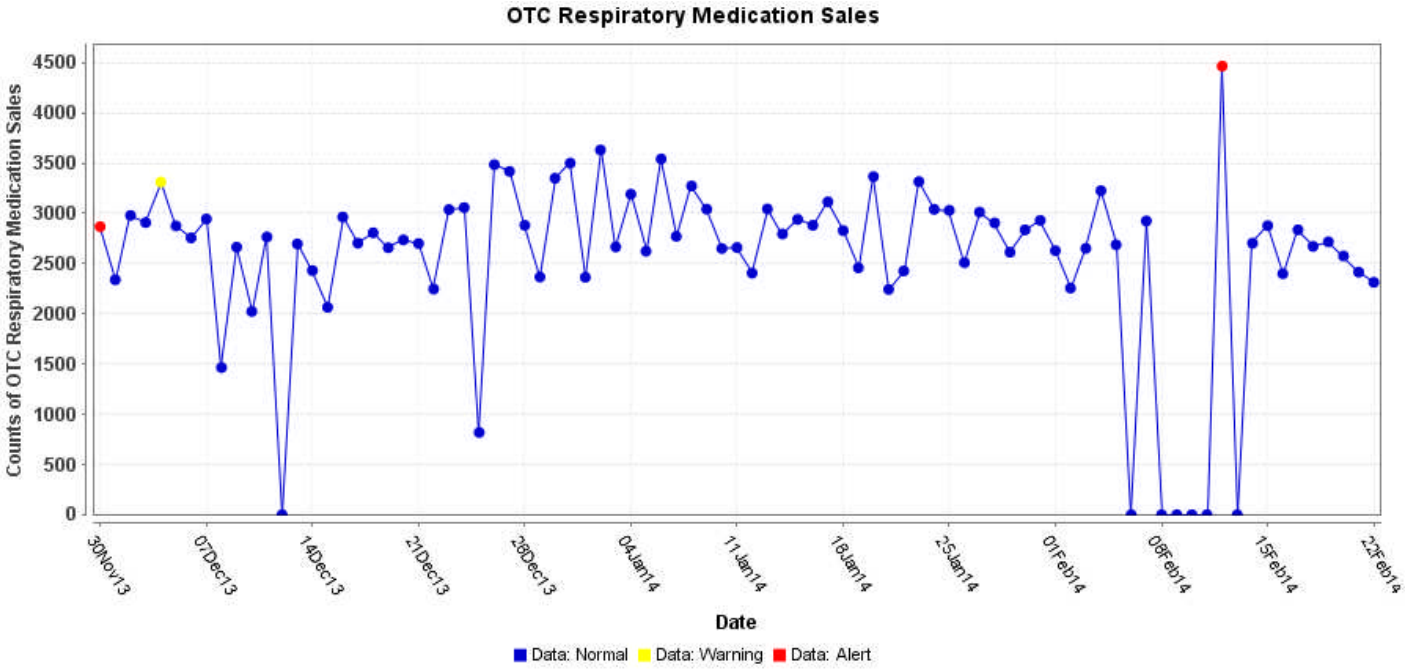
* Includes 2013 and 2014 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2014 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of January 24, 2013, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 650, of which 386 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

AVIAN INFLUENZA (H7N9): On [12 Feb 2014], The Ministry of Health (MOH) Malaysia reported a human case of avian influenza A(H7N9) virus. A 67-year-old woman tourist from Guangdong Province, China, arrived in Malaysia on [3 Feb 2014] in a tour group of 17 persons, including relatives, and stayed overnight in Kuala Lumpur, Malaysia. The tour group then went on a visit to Sabah, Malaysia from [4 to 6 Feb 2014]. On [7 Feb 2014], she was admitted to hospital and later transferred to another hospital in Sabah. The patient is currently in a stable condition. Four days prior to travelling to Malaysia, on [30 Jan 2014], she was treated in China for symptoms of fever, cough, flu, fatigue, and joint pain. Given the onset of symptoms, and travel dates, the most likely exposure occurred before arrival in Malaysia. The Malaysia Ministry of Health is conducting an investigation including contact tracing and is also coordinating information sharing with the Chinese government. While the recent report of avian influenza A(H7N9) virus detection in live poultry exported from mainland China to Hong Kong SAR shows the potential for the virus to spread through movement of live poultry, at this time there is no indication that international spread of avian influenza A(H7N9) has occurred. However, as the virus infection does not cause signs of disease in poultry, continued surveillance is needed. Should human cases from affected areas travel internationally, their infection may be detected in another country during or after arrival. If this were to occur, community level spread is unlikely, as the virus does not have the ability to transmit easily among humans. Until the virus adapts itself for efficient human-to-human transmission, the risk of ongoing international spread of H7N9 virus by travellers is low. The overall risk assessment has not changed. Further sporadic human cases of avian influenza A(H7N9) infection are expected in affected and possibly neighbouring areas, especially given expected increases in the trade and transport of poultry associated with the Lunar New Year. WHO advises that travellers to countries with known outbreaks of avian influenza should avoid poultry farms, or contact with animals in live bird markets, or entering areas where poultry may be slaughtered, or contact with any surfaces that appear to be contaminated with faeces from poultry or other animals. Travellers should also wash their hands often with soap and water. Travellers should follow good food safety and good food hygiene practices. WHO does not advise special screening at points of entry with regard to this event, nor does it currently recommend any travel or trade restrictions. As always, a diagnosis of infection with an avian influenza virus should be considered in individuals who develop severe acute respiratory symptoms while travelling or soon after returning from an area where avian influenza is a concern. WHO encourages countries to continue strengthening influenza surveillance, including surveillance for severe acute respiratory infections (SARI), and to carefully review any unusual patterns in order to ensure reporting of human infections under the IHR (2005) and continue national health preparedness actions.

NATIONAL DISEASE REPORTS*

LISTERIOSIS (CALIFORNIA, MARYLAND): 21 February 2014, A listeriosis outbreak linked to cheese has killed 1 person in California and sickened 7 in Maryland, including 3 newborns. The Centers for Disease Control and Prevention (CDC) said Friday [21 Feb 2014] that the outbreak is linked to semi-soft, Latino-style cheese called Cuajada en Terron that is sold from a chain of grocery stores in Maryland. The cheese was made by Roos Foods of Kenton, Delaware. The Maryland Department of Health and Mental Hygiene issued a warning Wednesday [19 Feb 2014] to avoid products made by Roos Foods, which also sells cheese under the brand names Santa Rosa de Lima, Amigo, Mexicana, Suyapa, La Chapina, and La Purisima Crema Nica. The CDC did not name the grocery chain linked to the outbreak. The illnesses were diagnosed between [1 Aug 2013] and [27 Nov 2013]. Of the 8 cases, 7 were hospitalized; 5 of the illnesses were related to a pregnancy. Listeriosis is an infection caused by eating food contaminated with the bacterium *Listeria monocytogenes*. Symptoms include fever and muscle aches and diarrhea. Seniors, pregnant women and newborns are particularly vulnerable to the illness. In 2011, 33 people died after consuming cantaloupe contaminated with *Listeria*. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS*

BOTULISM (ARGENTINA): 22 February 2014, A girl of 8 years living in Villa 25 de Mayo died on Friday night, 14 Feb 2014, and it is suspected that she contracted botulism after eating marinated vizcacha at a family dinner. It all began the night before when the girl, her father, a friend and 2 other women related to the family ate the homemade product. The next day, they all began to have fever, vomiting and diarrhea until, for unknown reasons, the girl suffered from asthenopia [an ophthalmological condition with nonspecific symptoms such as fatigue, red eyes, eye strain, pain in or around the eyes, blurred vision, headache and occasional double vision] and had a cardiac arrest. Apparently, according to the preliminary results of the autopsy, it was found that the girl "suffered a pulmonary edema which would have caused death," noted reliable sources. After the autopsy, the medical corps from forensic samples sent gastric fluids and stool to the National University of Cuyo to determine if the girl had botulism. The suspicion of botulism grew after her father and a friend began to have difficulty speaking and forced hospitalizations in the intensive care units of the Schestakow and the Spanish Hospital of San Rafael, Mendoza Province. These symptoms, according to the specialists, "are very common in patients with botulism." In this context it was learned that 2 more women who had consumed the escabeche had vomiting and diarrhea. The director of the Schestakow, Armando Dauverne, reported that "speaking with Aldo Sergio Saracco, [head of] the provincial level of Toxicology, accelerated studies of the samples sent to the National University of

Cuyo will be done," and added that "for now, all indicate that we are faced with 3 cases of botulism and [2 other suspected cases]." Regarding the death of the girl, the Director pointed out that "the girl was pronounced dead on arrival at the health center and then transferred to the Judicial Morgue," and he added that "apparently choking was the cause of death." In this framework, the pediatrician Gonzalo Herrera, who works at the hospital, explained that "it is very likely that the girl had the toxin in her body, because she had vomiting, diarrhea and fever, as [did] the father, who is now in the hospital intensive care." Background: A woman of 84 years and a man of 69 died of botulism in 2013 as a result of having ingested homemade food. The 1st case took place in March 2013 in General Alvear, when the man died, and the 2nd was in October 2013 when a woman died after a month of confinement in the Spanish Hospital. In the latter case, 2 other women became ill after consuming packaged peppers. All patients underwent treatment with antitoxin that the Ministry of Health of the province provided. (Botulism is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

BRUCELLOSIS (BRAZIL): 19 February 2014, 17 workers from the Big Boi [Big Bull] refrigerator company in Paicandu metropolitan region of Maringa, northwest Parana were infected with brucellosis, which causes the so-called "cow disease." The event was reported in December 2013 but was only released this week. Since then, the employees have been treated and released. Earlier this week [10-12 Feb 2014], the president of the Syndicate of Food Industry Workers of Maringa (STIAM), Roberto Pino Jesus, reported the case to the Human Rights Commission of the Senate. According to the president of the union, the complaint was formalized to draw attention to the non-application of Norm 36, in force since April 2013, which dictates the rules that establish the minimum requirements for assessing, controlling, and monitoring risks existing in activities in the slaughtering and processing of meat and the meat industry. According to [Roberto Pino Jesus], the individual safety equipment that protects body, mouth, and eyes, for example, was not being used in the Paicandu refrigerator. But the president emphasized that the problem does not begin there. According to him, there are many gaps in oversight by the government. "The supervision is ineffective. Often, the farmer can beat the system and get the GTA [the Animal Transportation Certificate] and present documentation stating that the animal has been vaccinated when it has not been, and when it was sick but nevertheless was sent for slaughter." (Brucellosis is listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

National and International Disease Reports are retrieved from http://www.promedmail.org/.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumococcal meningitis, viral encephalitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephalitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	Not applicable
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable